



Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, NW
Washington, DC 20554

March 18, 2019

Re: Recommendations Approved by WRC-19 Advisory Committee, IB Docket 16-185

Dear Ms. Dortch:

EchoStar Satellite Services, LLC and Hughes Network Systems, LLC (collectively, EchoStar), in response to Public Notice dated March 11, 2019,¹ submit these comments in the above referenced proceeding. As discussed herein, EchoStar urges the FCC to:

- Adopt a no change proposal for WAC/083 to ensure adequate access to spectrum for important broadband satellite uses;
- Support WAC/89 and WAC/90 as future agenda items; and
- Add to WAC/94 appropriate protection language with regard to geostationary orbit (“GSO”) satellite systems.

EchoStar is the largest U.S.—and fourth largest worldwide—commercial GSO satellite operator providing broadband, video, and other services to meet the needs of its customers, including internet service providers, media and broadcast organizations, direct-to-home providers, enterprise customers, government service providers, and residential consumers in the United States and abroad. Its Hughes Network Systems subsidiary is the nation’s largest provider of satellite broadband services and the largest global provider of satellite broadband services, with approximately 1.3 million subscribers in the Americas. Adoption of the proposals advocated herein will foster EchoStar’s efforts to bring cutting edge satellite services to more users as part of the developing 5G ecosystem.

WAC/083: EchoStar supports View B reflected in Document WAC/083, relating to 50.4-52.6 GHz under Agenda Item 1.13.² No change to the table of allocations in this band is warranted because the spectrum needs for IMT in the 37.5-52.6 GHz range, determined to be 6.1 GHz by ITU-R studies, have been met and exceeded by other United States proposals to identify spectrum for IMT in a number of other bands above 24 GHz. In addition to spectrum needs for IMT having been met by prior United States proposals, a segment of this band is under consideration for allocation to the fixed-satellite service as discussed below. Of equal importance is the very real requirements of the satellite community for access to adequate spectrum to meet the demands of its customers for high speed broadband services, including in underserved areas or areas unserved by terrestrial networks. In fact, portions of this band, the 50.4-51.4 GHz band, is a critical part of the spectrum that Hughes is relying on in constructing its FCC-licensed

¹ Public Notice, DA 19-172, *International Bureau Seeks Comment on Recommendations Approved by World Radiocommunication Conference Advisory Committee* (March 11, 2019).

² Attachment A to Public Notice DA-19-172, Document WAC/083, View B, at 40-43.

EchoStar XXIII satellite, which provide broadband speeds of approximately 100 Mbps across the United States.

WAC/089 and WAC/90: EchoStar supports the Future Agenda Items contained in Documents WAC/089 and WAC/090 for inclusion on the WRC-23 agenda. Document WAC/089³ seeks to study non-geostationary orbit (“NGSO”)-to-GSO links using bands allocated to the fixed-satellite service, and to determine the conditions under which these links may be accommodated within the fixed-satellite service as opposed to the inter-satellite service. As there is a current movement by NGSO systems seeking to operate in the Ka and V bands for interatellite service links it is critical that this issue be studied to determine the potential interference issues to Earth-to-space links in the fixed-satellite service to GSOs, as well as action for an appropriate regulatory solution.

Document WAC/090⁴ is a proposal to retain Agenda Item 2.4 on the Preliminary WRC-23 agenda, a Future Agenda item that was advanced by the United States at WRC 2015. This item seeks to study the use of the 37.5-39.5 GHz band in the Earth-to-space direction in the fixed-satellite service. The text is substantively unchanged from the proposal advanced by the United States at WRC-15 for inclusion in a future agenda. The proposal was fully vetted four years ago, and its deferral to the WRC-23 agenda was an integral part of a compromise to address several varying uses of this band over two WRCs. The need for additional capacity in next generation broadband fixed-satellite service networks is significant and cannot be satisfied by WRC-19 Agenda Item 9, Issue 9.1.9 alone. This proposal is appropriately structured to avoid causing interference into any IMT identifications obtained at WRC 2023 in the 37.5-39.5 GHz band. Accordingly, the United States should continue to support this item as it did at WRC-15.

WAC/094: For Document WAC/094,⁵ seeking to address NGSO operation in the 71-76 and 81-86 GHz bands, EchoStar does not object to this issue being addressed at WRC-23. However, the text of the proposal fails to adequately reflect that GSO operation in the fixed-satellite service is permitted today and must be protected by any future introduction of NGSOs into the band. If a proposal on this issue goes forward, it should be structured in a manner similar to WRC-19 Agenda Item 1.6 (NGSOs in certain ranges from 37.5-51.4 GHz), which explicitly calls out protection of FSS GSO networks as an item to be studied.

³ Attachment B to Public Notice DA-19-172, Document WAC/089, at 25-31.

⁴ Document WAC/090, *id.* at 32-35.

⁵ Document WAC/094, *id.* at 56-63.



Please contact the undersigned if you need any additional information.

Respectfully submitted,

/s/ Jennifer A. Manner

Jennifer A. Manner

Senior Vice President, Regulatory Affairs

EchoStar Satellite Services, LLC and Hughes Network System, LLC

11717 Exploration Drive

Germantown, MD 20876

+1 301 428-5893

jennifer.manner@echostar.com

/s/ Brennan T. Price

Brennan T. Price

Senior Principal Engineer, Regulatory Affairs

EchoStar Satellite Services, LLC and Hughes Network System, LLC

11717 Exploration Drive

Germantown, MD 20876

Phone +1 301 428-1654

brennan.price@echostar.com

cc: Tom Sullivan

Michael Mullinix

Dante Ibarra